Attached hereto is a marked up version of the changes made to the claims by the current amendment. The attached page is captioned "**Version With Markings To Show Changes Made.**"

Respectfully submitted,

Thomas J. Clough
Registration No. 22337
Attorney for Applicant
P.O. Box 718
Pismo Beach, California 93448
(805) 481-3750
Facsimile (805) 481-3452

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to Commissioner of Patents and Trademarks, Washington, D.C. 29231 on or before Sept 3, 2002.

Dated this 30th day of Sept, 2002.

Thomas J. Clough, Attorney

Version With Markings To Show Changes Made

Claim 1 (Once Amended) A [battery element] fiber mat separator useful as an electrolyte reservoir [as a fiber mat separator] in a [recombinant] lead acid battery [comprising a] wherein the fiber mat separator[, positive and negative active material, sulfuric acid electrolyte and] comprises an acid resistant metal impurity inhibiting amount of micronized porous organic polymer particles having [an average particle size distribution less than 3 microns] a 50 percent number count less than about 2 microns and functional groups on the internal surfaces of the micronized porous organic polymer particles which have a preferential affinity over lead ion for at least one electrolyte soluble metal cation impurity ion more nobler than lead at the discharge charge electrochemical and sulfuric acid molarity conditions of the battery provided that the metal cation impurity ion is not detrimentally desorbed or released under said conditions, soluble lead ion has a reduced affinity for bonding with the functional groups and [further] said micronized porous organic [porous] polymer particles are [is associated with said separator and in contact with] accessible to the metal impurity ion containing electrolyte to allow said ion to permeate the internal surfaces of the micronized porous organic polymer particles.

Claim 2 (Once Amended) The [element] separator of Claim 1 wherein the micronized porous organic polymer particles [has] have acid [functionality] functional groups.

Claim 3 (Once Amended) The [element] separator of Claim 2 wherein the acid [functionality is] functional groups are aminophosphonic.

Claim 4 (Once Amended) The [element] separator of Claim 1 wherein the micronized porous organic polymer particles [has] have thiouronium [functionality] functional groups.

Claim 5 (Once Amended) The [element] separator of Claim 3 wherein the micronized porous organic polymer particles [is a] are cross-linked polystyrene and the cross-linking is by divinylbenzene.

Claim 6 (Once Amended) The [element] separator of Claim 4 wherein the micronized porous organic polymer particles [is a] are cross-linked polystyrene and the cross-linking is by divinylbenzene.

Claim 7 (Once Amended) The [element] separator of Claim 3 wherein the metal cation impurity ion is selected from the group consisting of antimony and iron.

Claim 8 (Once Amended) The [element] separator of Claim 4 wherein the metal cation impurity ion is silver.

Claim 9 (Once Amended) The [element] separator of Claim 1 wherein the [average particle size] number count is less than about one micron.

Claim 10 (Once Amended) The [element] separator of Claim 3 wherein the [average particle size] number count is less than about one micron.

Claim 11 (Once Amended) A [battery element] fiber mat separator useful as an electrolyte reservoir [as a fiber mat separator] in a [recombinant] lead acid battery [comprising a] wherein the fiber mat separator[, positive and negative active material, sulfuric acid electrolyte and] comprises an acid resistant metal impurity inhibiting amount of micronized porous organic polymer particles having [an average particle size distribution less than 3 microns and] functional groups on the internal surfaces of the

micronized porous organic polymer particles which have a preferential affinity over lead ion for at least one electrolyte soluble metal cation impurity ion more nobler than lead at the discharge charge electrochemical and sulfuric acid molarity conditions of the battery provided that the metal cation impurity ion is not detrimentally desorbed or released under said conditions, soluble lead ion has a [y] reduced affinity for bonding with the functional groups and [said organic porous polymer is associated with the internal porosity of] macroporous particles having an average particle size distribution less than 25 microns and a pore size distribution which allows for a plurality of said micronized porous organic polymer particles to be associated with the internal porosity of said macroporous particles and said micronized porous organic polymer particles and macroporous particles are [associated with said separator and in contact with] accessible to the metal impurity ion to allow said ion to permeate the internal surface of the micronized porous organic polymer particles.

Claim 12 (Once Amended) The [element] separator of Claim 11 wherein the micronized porous organic polymer particles [has] have acid [functionality] functional groups.

Claim 13 (Once Amended) The [element] separator of Claim 12 wherein the acid [functionality is] functional groups are aminophosphonic.

Claim 14 (Once Amended) The [element] separator of Claim 11 wherein the micronized porous organic polymer particles [has] have thiouronium [functionality] functional groups.

Claim 15 (Once Amended) The [element] separator of Claim 12 wherein the micronized porous organic polymer particles [is a] are cross-linked polystyrene and the cross-linking is by divinylbenzene.

Claim 16 (Once Amended) The [element] separator of Claim 13 wherein the micronized porous organic polymer particles [is a] are cross-linked polystyrene and the cross-linking is by divinylbenzene.

Claim 17 (Once Amended) The [element] separator of Claim 13 wherein the metal cation impurity ion is selected from the group consisting of antimony and iron.

Claim 18 (Once Amended) The [element] separator of Claim 14 wherein the metal cation impurity ion is silver.

Claim 19 (Once Amended) The [element] separator of Claim 11 wherein the micronized porous organic polymer particles have a [average particle size] 50% number count [is] less than [one] about two microns [micron].

Claim 20 (Once Amended) The [element] separator of Claim 13 wherein the micronized porous organic polymer particles have a [average particle size] 50% number count [is] less than [one] about two microns [micron].

Claim 21 (Once Amended) A [battery element] fiber mat separator useful as an electrolyte reservoir [as a fiber mat separator] in a [recombinant] lead acid battery [comprising a] wherein the fiber mat separator[, positive and negative active material, sulfuric acid electrolyte and] comprises an acid resistant metal impurity inhibiting amount of micronized porous organic polymer particles having [an average particle size distribution less than 3 microns and] functional groups on the internal surfaces of the micronized porous organic polymer particles which have a preferential affinity over lead

ion for at least one electrolyte soluble metal cation impurity ion more nobler than lead at the discharge charge electrochemical and sulfuric acid molarity conditions of the battery provided that the metal cation impurity ion is not detrimentally desorbed or released from the functional groups under said conditions, soluble lead ion has a reduced affinity for bonding with the functional groups and [said organic porous polymer is associated with the fiber and the internal porosity of macroporous particles through a cationic linking polymer, said] macroporous particles having an average particle size distribution less than 25 microns and a pore size distribution which allow for a plurality of micronized porous organic polymer particles to be associated with the internal porosity of said macroporous particles and said micronized porous organic polymer particles and said macroporous particles are associated with each other through a cationic linking polymer and [with said separator and in contact with] accessible to the metal impurity ion containing electrolyte to allow said ion to permeate the internal surface of the micronized porous organic polymer particles

Claim 22 (Once Amended) The [element] separator of Claim 21 wherein the micronized porous organic polymer particles [has] have acid [functionality] functional groups.

Claim 23 (Once Amended) The [element] separator of Claim 22 wherein the acid [functionality is] functional groups are aminophosphonic.

Claim 24 (Once Amended) The [element] separator of Claim 21 wherein the micronized porous organic polymer particles [has] have thiouronium [functionality] functional groups.

Claim 25 (Once Amended) The [element] separator of Claim 22 wherein the micronized porous organic polymer particles [is a] are cross-linked polystyrene and the cross-linking is by divinylbenzene.

Claim 26 (Once Amended) The [element] separator of Claim 24 wherein the micronized porous organic polymer particles [is a] are cross-linked polystyrene and the cross-linking is by divinylbenzene.

Claim 27 (Once Amended) The [element] separator of Claim 23 wherein the metal cation impurity ion is selected from the group consisting of antimony and iron.

Claim 28 (Once Amended) The [element] separator of Claim 24 wherein the metal cation impurity ion is silver.

Claim 29 (Once Amended) The [element] separator of Claim 21 wherein the micronized porous organic polymer particles have a [average particle size] 50% number count [is] less than [one] about two microns [micron].

Claim 30 (Once Amended) The [element] separator of Claim 23 wherein the micronized porous organic polymer particles have a [average particle size] 50% number count [is] less than [one] about two microns [micron].

Claim 31 (Once Amended) The [element] separator of Claim 21 wherein the [fiber] fibers in the fiber mat separator [is] are selected from the group consisting of glass, organic polymer and mixtures thereof.

Claim 32 (Once Amended) The [element] separator of Claim 31 wherein the fibers are predominantly glass microfibers.

Underline – Added Material
Brackets [] – Deleted Material